**Topics in Geriatrics: Fatigue**

Fatigue is a common and multifactorial issue affecting the geriatric population that can arise from a variety of etiologies (including: pulmonary disease, cardiovascular disease, autoimmune disease, deconditioning, medications, sleeplessness, etc). This symptom has been associated with a variety of health concerns in the geriatric adult including frailty, and this page aims to provide greater understanding into it’s diagnosis and treatment through evidenced based strategies.1

**Objectives:**

1. Explain what fatigue is, and who it impacts within the geriatric population
2. Provide general information about fatigue’s impact on physical therapy treatment
3. Provide evidence based screening and treatment options
4. Provide alternate sources of information

**What is fatigue?**

Fatigue can be both normal and pathological. The normal variant is the human body's natural response to exercise, and is often termed fatigability or exertion fatigue. The pathological variant (which goes by a variety of names including asthenia, abnormal fatigue, and pathological fatigue), refers to a debilitating decrease in strength and energy that interferes with an individual's ability to participate in activities as he or she normally would. (Self-Reported Aging-Related Fatigue: A Concept Description and Its Relevance to Physical Therapist Practice). This page will focus on the pathological form.

**Who is affected?**

As stated earlier, fatigue has been lined with a variety of conditions, but its cause is not always obvious. This symptom does appear to impact the geriatric population more greatly than younger populations, with inconclusive data pertaining to whether employment plays any role.1

**Physical Therapy Relevance**

A large issue fatigue poses for physical therapy is it’s potential to reduce compliance with home exercise programs. While fatigue has not been shown to reduce benefits seen with physical therapy, studies have reported fatigue as a barrier to physical activity.1 Thus, treating and monitoring fatigue is vital to achieving good outcomes with patients who report it as a symptom.

**Screening / Documentation**

Like other complex symptoms, tracking intensity with a numerical scale is not enough to enact meaningful change. Egerton, in the article “Self-Reported Aging-Related Fatigue: A Concept Description and Its Relevance to Physical Therapist Practice”, suggested that the documentation and treatment of fatigue requires a client centric, multifactorial approach. He likened the tracking and treatment of fatigue to that of pain, suggesting clinicians monitor fatigue: intensity, aggravating and alleviating components, and corresponding functional impairments.1

There are a multitude of scales and questionnaires used to track fatigue. A concern raised by Egerton is that fatigue arising from different etiologies may not be the same symptom; therefore, clinicians should be mindful when choosing a fatigue measure for their patients. When choosing a fatigue scale, clinicians should aim to use one validated for the particular client he/she is treating. The table below lists some of the most commonly used fatigue scales.

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| --- | --- | --- |
| Scale | Population | Source |
| Fatigue Severity Scale | * Cancer * Elderly Population * Fibromyalgia * Lyme’s Disease * Multiple Sclerosis * Parkinson’s Disease * People with major depression * Post Polio Patients * Rheumatoid Arthritis * Stroke * Systemic Lupus Erythematosus | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1101> |
| Global Fatigue Index | * Traumatic Brain Injury * Pulmonary disease * Osteoarthritis * Rheumatoid arthritis * Hepatitis C * Multiple Sclerosis * Synovitis * HIV+ adults with IL-2HIV+ adults * Oncology, mixed cancer diagnosis * Coronary heart disease * Breastfeeding women * Postpartum women | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1085> |
| Modified Fatigue Impact Scale (MFIS) | * Multiple Sclerosis * Traumatic Brain Injury | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1084> |
| The Brief Fatigue Inventory (BFI) | * Multiple Sclerosis | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1190> |
| Fatigue Scale for Motor and Cognitive Functions: | * Multiple Sclerosis | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1210> |
| Multi-Component Fatigue Scale: | * Multiple Sclerosis | <http://www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=1220> |

**Treatment**

Treatment of fatigue relies very heavily on properly diagnosing its etiology, thus documenting a detailed history is vital. Comorbidities, activity, sleep, and medications all play a role in a person's level of fatigue. It has even been suggested that old age alone may cause fatigue.1 Documenting this relevant information along with the factors mentioned earlier on this page (intensity, aggravating and alleviating components, along with any corresponding functional impairments) will aid the therapist in identifying the source of the patients fatigue, so that he or she can provide the most appropriate care.

A randomized control trial studying exercise adherence in nursing home residents developed a program which in part targeted fatigue. The suggestions it made with respect to fatigue were as follows: “(1) Investigate medically treatable causes of fatigue (2) Establish an appropriate rest- activity schedule (3) Stress the importance of exercise to combat fatigue.1” This study reported increased exercise participation, as well as increased self efficacy of the participants with respect to exercise.

A meta-analysis found chronic exercisers had reduced fatigue levels.4 One of the interesting findings of the study was that the mode of exercise is important. With respect to those experiencing fatigue secondary to depression, strength training was found to be more effective than aerobic activity at decreasing self reported fatigue levels. Another study looking only at patients with cancer found strength training to be more important than aerobic exercise in the reduction of perceived fatigue levels.3 It noted that the best reductions were noted with regimens that included strengthening, aerobic, and stretching components.

Various sources exist that provide suggestions on how to manage fatigue. In general, regular exercise at a moderate intensity is recommended. The CDC recommends exercising and stretching earlier in the day, and avoiding naps for more restful sleep at night.6 The National Institute on aging suggests incorporating exercises with elements of balance and breathing, as these have been shown to improve individuals perceived energy levels.2 The MS Society provides energy conservation techniques focusing on prioritizing your time and organizing your living and working space for efficiency.5 The additional resources section below provide contains links to education materials (mainly patient centric) on these topics.

**Additional Resources**

1. National Institute on Ageing (<https://www.nia.nih.gov/health/publication/fatigue>)
   1. General patient centric information on fatigue in geriatric populations
2. Rehabmeasures.org (<http://www.rehabmeasures.org/default.aspx>)
   1. A good source for current scales, questionnaires, and other clinical measures of fatigue
3. Fatigue - CDC.gov (<http://www.cdc.gov/cfs/management/treating-symptoms.html>)
   1. Symptom management suggestions
4. Mssociety.org (<https://www.mssociety.org.uk/what-is-ms/signs-and-symptoms/fatigue/treatment-and-management>)
   1. Symptom management suggestions
5. Depression - CDC.gov (<http://www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm>)
   1. General information on depression, a condition common in geriatric populations which correlates with increased fatigue levels

**References**

1. Egerton, Thorlene. "Self-Reported Aging-Related Fatigue: A Concept Description and Its Relevance to Physical Therapist Practice." Physical Therapy 93.10 (2013): n. pag. Web. 5 July 2016.
2. "Fatigue - More than Being Tired." National Institute on Aging. N.p., Jan. 2012. Web. 5 July 2016.
3. Meneses-Echa´vez, Jose´ F., Emilio Gonza´lez-Jime´nez, and Robinson Ramı´rez-Ve´lez. "Supervised Exercise Reduces Cancer-related Fatigue: A Systematic Review." Journal of Physiotherapy 2015 (2015): 3-9. Web. 5 July 2016.
4. Puetz,, Timothy W., Patrick J. O’Connor, and Rod K. Dishman. "Effects of Chronic Exercise on Feelings of Energy and Fatigue: A Quantitative Synthesis."Psychological Bulletin 132.6 (2006): 866-76. Web. 5 July 2016.
5. "Treating and Managing Fatigue." Multiple Sclerosis Society. N.p., June 2016. Web. 5 July 2016.
6. "Treating the Most Disruptive Symptoms First." Centers for Disease Control and Prevention. N.p., 14 Feb. 2013. Web. 5 July 2016.

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If I object to putting my assignment in this public forum, I will tell my instructor, so she may give me an alternate assignment.

Signed\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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